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Baker Botts L.L.P. 2001 Rose Avenue Dallas, TX 75201-2980			WON, MICHAEL YOUNG	
			ART UNIT	PAPER NUMBER
			2155	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)	
09/759,406	LOWERY ET AL.	
Examiner	Art Unit	
Michael Y. Won	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30,95-101 and 105 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30,95-101 and 105 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is in response to the Request For Continued Examination and the amendment filed February 27, 2006.
2. Claims 1, 16, 95, 98, 101, and 105 have been amended.
3. Claims 1-30, 95-101, and 105 have been examined and are pending with this action.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 16, and 101 are rejected under 35 U.S.C. 102(b) as being anticipated by Boyle (US 5,864,854 A).

As per ***claim 1***, Boyle teaches of a method for dynamic distributed data caching comprising:

providing a cache community on a first side of a point of presence, the cache community comprising at least one peer, each peer having associated first content

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portion (see col.3, lines 58-60: "entry") indicating content obtained from a second side of the point of presence to be cached by the respective peer (see abstract; Fig.5, steps 102→106→120→122; and col.1, line 64-col.2, line 9);

allowing a client to join the cache community (see col.2, lines 5-9: "group grows to include more clients");

updating peer list associated with the cache community to include the client (see col.3, lines 21-31, 35-38, and 55-60 and col.6, lines 55-58), the peer list indicating the peers in the cache community (see Fig.3 and col.4, lines 38-40);

associating a second content portion corresponding to the client with each peer based on joiner of the client (see col.4, lines 7-11), the second content portion being distinct from the first content portion (see col.3, line 60-col.4, line 11);

allocating the first content portion (see col.3, lines 42-44) and the second content portion among the peers in the cache community (see col.2, lines 40-44: "distributes the data"; col.3, lines 19-26: "to distribute replication of data items"; col.4, lines 18-24: "to obtain a copy of the data item"; and col.5, lines 3-11), in response to allowing the client to join the community (implicit: see col.3, line 44).

As per **claim 16**, Boyle teaches a system for dynamic distributed data caching comprising:

logic encoded on storage and operable to (see col.11, lines 13-17):

provide a cache community on a first side of a point of presence, the cache community comprising at least one peer, each peer having associated first content

portion (see col.3, lines 58-60: "entry") indicating content obtained from a second side of the point of presence to be cached by the respective peer (see abstract; Fig.5, steps 102→106→120→122; and col.1, line 64-col.2, line 9);

allow a client to join the cache community (see col.2, lines 5-9: "group grows to include more clients");

update peer list associated with the cache community to include the client (see col.3, lines 21-31, 35-38, and 55-60 and col.6, lines 55-58), the peer list indicating the peers in the cache community (see Fig.3 and col.4, lines 38-40);

associate a second content portion corresponding to the client with each peer based on joiner of the client (see col.4, lines 7-11), the second content portion being distinct from the first content portion (see col.3, line 60-col.4, line 11);

allocate the first content portion (see col.3, lines 42-44) and the second content portion among the peers in the cache community (see col.2, lines 40-44: "distributes the data"; col.3, lines 19-26: "to distribute replication of data items"; col.4, lines 18-24: "to obtain a copy of the data item"; and col.5, lines 3-11), in response to allowing the client to join the community (implicit: see col.3, line 44).

As per **claim 101**, Boyle teaches a system for dynamic distributed data caching comprising:

means for providing a cache community on a first side of a point of presence, the cache community comprising at least one peer, each peer having associated first content portion (see col.3, lines 58-60: "entry") indicating content obtained from a

second side of the point of presence to be cached by the respective peer (see abstract; Fig.5, steps 102→106→120→122; and col.1, line 64-col.2, line 9);

means for allowing a client to join the cache community (see col.2, lines 5-9: "group grows to include more clients");

means for updating peer list associated with the cache community to include the client (see col.3, lines 21-31, 35-38, and 55-60 and col.6, lines 55-58), the peer list indicating the peers in the cache community (see Fig.3 and col.4, lines 38-40);

means for associating a second content portion corresponding to the client with each peer based on joiner of the client (see col.4, lines 7-11), the second content portion being distinct from the first content portion (see col.3, line 60-col.4, line 11);

allocating the first content portion (see col.3, lines 42-44) and the second content portion among the peers in the cache community (see col.2, lines 40-44: "distributes the data"; col.3, lines 19-26: "to distribute replication of data items"; col.4, lines 18-24: "to obtain a copy of the data item"; and col.5, lines 3-11), in response to allowing the client to join the community (implicit: see col.3, line 44).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 95-100 and 105 are rejected under 35 U.S.C. 102(e) as being anticipated by Maggenti et al. (US 6,477,150 B1).

**INDEPENDENT:**

As per **claim 95**, Maggenti teaches a method for dynamic distributed data caching comprising:

communicating a community request to an administration module (see col.3, lines 55-63);

receiving a community list from the administration module in response the community request, the community list including a list of communities (see col.5, lines 38-49 and col.12, lines 16-20);

selecting one of the communities to attempt to join (see col.7, lines 43-46);

generating a join request to attempt to join the selected one of the communities (see col.10, lines 24-29; col.18, lines 36-37; and col.26, lines 65-66);

receiving an allow message associated with the selected one of the communities (see col.6, lines 64-66; col.12, lines 3-7; col.31, lines 49-51; and col.42, lines 48-50);

receiving a peer list associated with the selected one the communities (see col.17, lines 47-52 and col.20, lines 8-14);

receiving content allocated from the peers in the peer list in response to joining the selected one of the communities (see col.2, lines 26-38: "enables data packets from the data network to be distributed to various net members" and col.3, lines 55-63); and

providing content for allocation to peers in the peer list in response to joining the selected one of the communities (see col.2, lines 26-38: "enables data packets from the data network to be distributed to various net members" and col.3, lines 55-63).

As per **claim 98**, Maggenti teaches a system comprising:

- logic encoded on storage and operable to (see col.15, lines 44-46):
  - communicate a community request to an administration module (see col.3, lines 55-63);
  - receive a community list from the administration module in response the community request, the community list including a list of communities (see col.5, lines 38-49 and col.12, lines 16-20);
  - select one of the communities to attempt to join (see col.7, lines 43-46);
  - generate a join request to attempt to join the selected one of the communities (see col.10, lines 24-29; col.18, lines 36-37; and col.26, lines 65-66);
  - receive an allow message associated with the selected one of the communities (see col.6, lines 64-66; col.12, lines 3-7; col.31, lines 49-51; and col.42, lines 48-50);
  - receive a peer list associated with the selected one the communities (see col.17, lines 47-52 and col.20, lines 8-14);
  - receive content allocated from the peers in the peer list in response to joining the selected one of the communities (see col.2, lines 26-38: "enables data packets from the data network to be distributed to various net members" and col.3, lines 55-63); and



provide content for allocation to peers in the peer list in response to joining the selected one of the communities (see col.2, lines 26-38: "enables data packets from the data network to be distributed to various net members" and col.3, lines 55-63).

As per **claim 105**, Maggenti teaches a system for dynamic distributed data caching comprising:

means for communicating a community request to an administration module (see col.3, lines 55-63);

means for receiving a community list from the administration module in response to the community request, the community list including a list of communities (see col.5, lines 38-49 and col.12, lines 16-20);

means for selecting one of the communities to attempt to join (see col.7, lines 43-46);

means for generating a join request to attempt to join the selected one of the communities (see col.10, lines 24-29; col.18, lines 36-37; and col.26, lines 65-66);

means for receiving an allow message associated with the selected one of the communities (see col.6, lines 64-66; col.12, lines 3-7; col.31, lines 49-51; and col.42, lines 48-50);

means for receiving a peer list associated with the selected one of the communities (see col.17, lines 47-52 and col.20, lines 8-14);

means for receiving content allocated from the peers in the peer list in response to joining the selected one of the communities (see col.2, lines 26-38: "enables data

packets from the data network to be distributed to various net members” and col.3, lines 55-63); and

means for providing content for allocation to peers in the peer list in response to joining the selected on of the communities (see col.2, lines 26-38: “enables data packets from the data network to be distributed to various net members” and col.3, lines 55-63).

**DEPENDENT:**

As per **claims 96 and 99**, Maggenti further teaches wherein the community request comprises a CRMSG\_WAKEUP data message (implicit: see col.13, lines 63-65).

As per **claims 97 and 100**, Maggenti further teaches wherein the join request comprises a CRMSG\_REQUESTTOJOIN data message (implicit: see col.10, lines 24-29; col.18, lines 36-37; and col.26, lines 65-66).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-15 and 17-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle (US 5,864,854 A) in view of Maggenti et al. (US 6,477,150 B1).

As per **claims 2 and 17**, Boyle does not explicitly teach of further comprising: receiving a join request from the client; and determining whether to allow the client join the cache community.

Maggenti teaches of receiving a join request from the client (see col.10, lines 24-29; col.18, lines 36-37; and col.26, lines 65-66); and determining whether to allow the client join the community (see col.5, lines 34-37; col.12, lines 3-7; and col.31, lines 49-51).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Maggenti within the method and system of Boyle by implementing receiving a join request from the client and determining whether to allow the client join the community within the method and a system for dynamic distributed data caching because Boyle teaches that the "performance of each client typically improves as the group grows to include more clients, since data items can be obtained more quickly from another client in the group than from a server" (see col.2, lines 5-9) and teaches that the number of members of groups is "preferably selected such that the expected peak number of requests for any data item is not significantly delay by queuing (see col.5, lines 58-61).

As per **claims 3 and 18**, Boyle does not explicitly teach wherein the join request comprises a CRMSG\_REQUESTTOJOIN data message.

Maggenti further teaches wherein the join request comprises a CRMSG\_REQUESTTOJOIN data message (implicit: see col.10, lines 24-29; col.18, lines 36-37; and col.26, lines 65-66).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Maggenti within the method and system of Boyle by implementing receiving any join request message from the client within the method and a system for dynamic distributed data caching because such implementation allows the community to know that a client wants to join before a client has been joined.

As per **claims 4 and 19**, Boyle does not explicitly teach wherein allowing the client to join the cache community comprises: generating an allow message; associating the peer with the allow message; and communicating the allow message to the client.

Maggenti teaches of generating an allow message (see col.12, lines 3-7 and col.31, lines 49-51); associating the peer with the allow message (inherent); and communicating the allow message to the client (see col.12, lines 3-7 and col.31, lines 49-51).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Maggenti within the method and system of Boyle by implementing generating an allow message; associating the peer with the allow message; and communicating the allow message to the client within the method and a system for dynamic distributed data caching because Boyle teaches that the number of members of groups is “preferably selected such that the expected peak

number of requests for any data item is not significantly delay by queuing (see col.5, lines 58-61) and by generating, associating, and communicating and acknowledgment is relayed back so that the client device can be notified.

As per **claims 5 and 20**, Boyle does not explicitly teach wherein allowing the client to join the cache community comprises: generating an allow message comprising the peer list updated to include the clients; communicating the allow message to the client; and communicating the allow message to at least one member associated with the cache community:

Maggenti further teaches wherein allowing the client to join the cache community comprises: generating an allow message comprising the peer list updated to include the clients (see col.17, lines 47-52 and col.20, lines 8-14); communicating the allow message to the client (see claim 4 and 19 rejection above: redundant limitation); and communicating the allow message to at least one member associated with the cache community (see col.12, lines 16-28).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Maggenti within the method and system of Boyle by implementing generating an allow message comprising the peer list updated to include the clients; communicating the allow message to the client; and communicating the allow message to at least one member associated with the cache community within the method and a system for dynamic distributed data caching because by generating and communicating the allow message notifies every community device that a client has been joined.

As per **claims 6 and 21**, Boyle does not explicitly teach wherein the allow message comprises a CRMSG\_UPDATEPEERLIST data message.

Maggenti further teaches wherein the allow message comprises a CRMSG\_UPDATEPEERLIST data message (implicit: see col.12, lines 16-20).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Maggenti within the method and system of Boyle by implementing an allow message comprising CRMSG\_UPDATEPEERLIST data message within the method and a system for dynamic distributed data caching because such notification notifies every community device that a client has been joined and updates it the look-up table.

As per **claims 7 and 22**, Boyle does not explicitly teach wherein peer list associated with the allow message comprises updated peer which includes the client

Maggenti further teaches wherein peer list associated with the allow message comprises updated peer which includes the client (see col.12, lines 16-20).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Maggenti within the method and system of Boyle by implementing a peer list associated with the allow message comprising updated peer which includes the client within the method and a system for dynamic distributed data caching because such notification notifies every community device that a client has been joined and updates it the look-up table.

As per **claims 8 and 23**, Boyle further teaches wherein the point of presence is an ISP (implicit: see Fig.1 and col.2, lines 48-58).

As per **claims 9 and 24**, Boyle further teaches wherein a one of the peers comprises a member (see col.3, lines 58-61).

As per **claims 10 and 25**, Boyle does not explicitly teach wherein one of the peers comprises a master.

Maggenti teaches of a master (see col.3, lines 58-65: "communication manager (CM)").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Maggenti within the method and system of Boyle by implementing a master within the method and a system for dynamic distributed data caching because such an implementation provides centralized control for administering the functionalities.

As per **claims 11 and 26**, Boyle further teaches wherein associating a respective second content portion comprises: allocating respective second content portions peers in the peer list (see Fig.2 and Fig.3); and updating an allocation table indicate the second content portion associated with the peers (see col.8, lines 59-62).

As per **claims 12 and 27**, Boyle further teaches wherein the second content portions are distinct (implicit: see col.3, line 60-col.4, line 17: all the field may be distinct).

As per **claims 13 and 28**, Boyle further teaches wherein at least two of the second content portions overlap (implicit: see col.3, line 60-col.4, line 17: some of the fields may be the same).

As per **claims 14 and 29**, Boyle further teaches wherein the first and second content portions respectively comprise a plurality Internet Protocol domain names (see col.3, lines 60-48).

As per **claims 15 and 30**, Boyle teaches of further comprising removing the association between the first content portions and the peers (inherent).

### ***Response to Arguments***

7. Applicant's arguments filed February 27, 2006 have been fully considered but they are not persuasive. See Below.

With regards to claims 1, 16, and 101, the applicant(s) argue that the claimed invention is patentable because U.S. Patent 5,864,854 (*Boyle*) does not teach the amended claim limitation of "*allocate the first content portion and the second content portion among the peers in the cache community, in response to allowing the client to join the community*".

In response to the argument, the examiner has sited several locations in *Boyle* teaching this limitation (see rejection above).

With regard to claims 95-100 and 105, the applicant(s) argue that there is no motivation to combine the references U.S. Patent 6,477,150 (*Maggenti et al.*) and *Boyle*. The applicant(s) further argue that even if a motivation existed, "neither Boyle nor the Maggenti, et al. patent provide for content allocation upon joiner into a community as required in the claimed invention"



In response to the argument no motivation to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, *Boyle* suggests other clients can join the cache community to enhance performance (see column 2, lines 5-9).

Furthermore, it has been concluded with respect to the amendment that *Maggenti* alone teaches all the limitations of claim 95-100 and 105 (see rejection above). The amendment deleted the limitation “dynamic cache module” in which *Boyle* was relied upon to teach this limitation. The recitation “dynamic distributed data caching” which is recited in the preamble has not been given patentable weight. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

*Maggenti* clearly teaches of allocating contents upon all members of the community (see rejection above).

**Conclusion**

8. For the reason above claim 1-30, 95-101, and 105 remain rejected.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Y. Won whose telephone number is 571-272-3993. The examiner can normally be reached on M-Th: 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Won

A handwritten signature in black ink, appearing to read 'Michael Won', with a stylized flourish at the end.

May 11, 2006